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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/501,796	02/08/2000	Norm D. Schlaegel	A-68724/AJT	4387

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EXAMINER

DABNEY, PHYLESHA LARVINIA

ART UNIT	PAPER NUMBER
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2643

19

DATE MAILED: 12/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

**Application No.**

09/501,796

**Applicant(s)**

SCHLAEGEL, NORM D.

**Examiner**

Phylesha L Dabney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 28 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 2-5, 7-11, 15 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1, 6 and 12-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                              | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____.                                   |

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 24 November 2003 has been entered.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 6 recites the limitation "the seating member" in line 4. There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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1. Claims 1 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over G.W. French (U.S. Patent No. 2,573,132), in view of Antle (U.S. Patent No. 4,499,593).

Regarding claim 1, French '132 discloses an electro-acoustic system comprising: a fitted earmold (1) having a sound-conduction bore (7); a sound-conducting connector (2); a sound-conduction tubing (8) having a passage; and a speaker (14); wherein the internal diameter of the sound conducting tubing, the sound conducting connector, and the sound conducting bore is the same there along. French '132 inherently teaches an electrical cable (14'), since French '132 (col. 1 lines 5-15) is an improvement over French (U.S. Patent No. 2,545,731) and French '731 teaches a cord (2). French '132 does not teach an electrical plug connected to the other end of the electrical cable for electrical connection to an electrical sound-generating member. Antle teaches a type of electrical plug (44, 46, 48) attached to an electrical cable (38) for insertion into a sound producing system (col. 4 lines 40-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to attach the electrical plug of Antle to the electrical cable of French '132 for insertion into a sound producing system. Furthermore, the combination of French and Antle does not specifically teach the earmold conforming to the user's ear; however, since the combination of French and Antle does not limit the type of plastic material used to construct the earmold and it is known in the art to use hard or soft plastics, such as acrylics (hard) or silicone (soft, flexible, conformable), to construct earmolds. It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the earmold of a soft, flexible, conforming material, such as silicone, to provide comfort to the user and prevent amplified sound from escaping the ear canal resulting in acoustic feedback.

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Regarding claim 14, Neither French '132 nor French (U.S. Patent No. 2,545,731) teach the specifics of the electrical cable used; however, it is extremely well known in the art to use coiled electrical cables because they are less cumbersome. In addition, Antle teaches a type of electrical cable having a coiled section (38) for use with a sound producing system. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a coiled cable such as the one disclosed by Antle in the invention of French '132 for transferring electrical signals.

2. Claims 6 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over G.W. French (U.S. Patent No. 2,573,132), in view of Antle (U.S. Patent No. 4,499,593), and in further view of Schlaegel et al (U.S. Patent No. 5,753,870).

Regarding claim 6, the combination of French '132 and Antle does not teach the specific structure of the earmold or connector. Schlaegel teaches a specific structure for an earmold including a seating member (12a, 12b) mating with a connector (18) having an elbow configuration and including a tubing-receiving section (24), a latching section (22, 32, 34), and a passage (30) as a means for securing a specific type of connector (18). Since French '132 does not suggest or exclude any type of earmold structure, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the earmold and connector mating structure of Schlaegel could have been used in the combination of French '132 and Antle as a means of fixedly securing the connector inside the earmold.

Regarding claim 12, Schlaegel teaches the latching section (22, 32, 34) has an annular recess and an annular barb (32).

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Regarding claim 13, Schlaegel teaches a space (12b) provided in the entry section, and a nubbin (22) is disposed within the space.

### ***Response to Arguments***

3. Applicant's arguments filed have been fully considered but they are not persuasive.

4. With respect to the applicant's argument that the French reference does not teach the tube, connector, and bore as having the same diameter. Upon carefully measurement of the French reference, it was found that the three components have an internal diameter of about 2 cm which clearly anticipated the newly claimed limitations.

5. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

(selected text from rejection of claim 6 above) *Furthermore, the combination of French and Antle does not specifically teach the earmold conforming to the user's ear; however, since the combination of French and Antle does not limit the type of plastic material used to construct the earmold and it is known in the art to use hard or soft plastics, such as acrylics (hard) or silicone (soft, flexible, conformable), to construct earmolds. It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the earmold of a soft, flexible, conforming material, such as silicone, to provide comfort to the user and prevent amplified sound from escaping the ear canal resulting in acoustic feedback.*

(selected text from Paper number 15) *With respect to the applicant's argument that the prior art does not teach an earmold molded to "a particular shape that it retains after being exposed to a pressure or deformable force." These limitations are not in the claim. In addition,*

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*it is known to use soft, flexible materials, such as silicone, to construct earmolds of a particular shape. The fact that silicon is a rubbery polymeric material allows it to deform under pressure, expand to fill the ear canal, and return to its manufactured shape when force is removed. Furthermore, it is noted that the applicant also allows the material used for the earmold to be a rigid plastic (page 3 line 9). Acrylic is a known rigid plastic (a number of earmold materials and specific earmold shapes can be found in the web print out listed below).*

*With respect to the applicant's argument that the prior art does not teach an earmold capable of preventing amplified sound from escaping the ear canal. The examiner is allowed to rely on personal knowledge. Earmolds are known to expand in the ear, which causes them to abut the sides of the ear canal and prevent sound from leaking out of the canal, as well as, prevention surround sound from interfering with the sound signal. In addition, earmolds are being made of deformable, resilient expandable material to cushion when the user jaw is moving from talking, chewing, etc.*

In addition, the examiner supplied website pages from [www.earmolddesign.com](http://www.earmolddesign.com) to show that it is well established in the manufacture of earmolds prior to the applicant's invention to utilize soft rubbery materials to provide cushion to the user during periods of jaw movement and this rubbery material will expand and fill the ear to prevent sound from escaping. A matter of hindsight is not necessary or used to substantiate an obvious finding.

6. With respect to the applicant's argument regarding claim 6 that there isn't a suggestion in the primary reference or secondary reference of a connection. The examiner agrees with the applicant that there isn't support in the primary or secondary reference; however, support is clearly found in the third reference, Schlaegel (U.S. Patent No. 5,753,870, figure 1-3) which was presented in paper numbers 3, 5, 10, and 15 to support this limitation.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phylesha L Dabney whose telephone number is 703-306-5415. The examiner can normally be reached on Mondays, Tuesdays, Wednesdays, Fridays 8:30-5 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

**Any response to this action should be mailed to:**

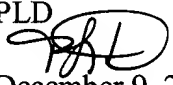
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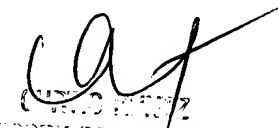
**Or faxed to:**

(703) 872-9314, for formal communications intended for entry and for informal or draft communications, please label "Proposed" or "Draft" when submitting an informal amendment.

(703) 306-0377, for customer service questions.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

PLD  
  
December 9, 2003

  
CURTIS KUNTZ  
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